

5/18 W/O SPLIT

DART AEROSPACE LTD	Work Order:	23001 B
Description: Hub Sleeve	Part Number:	D3233-5
Dwg: D3233 Rev. B	Qty:	34 Z6
		Page 1 of 1

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler	KJ	05.04.13	34
2	CL	Turn as per Dwg D3233 Material: AISI 1020-1025 Seamless Round Tubing Cold Drawn per MIL-T-5066 or ASTM A513-00 MT1020 SRA or AMS 5075 or AMS 5077 (M1020TR1.875W.250) Identify for D3233-5		JG	05/06/14 34
3	QC2	Inspect parts as they come off the machine Identify as D3233-5	JG	05/06/15	34
4	CM	Mill as per Dwg D3233	RG	05.06.21	26
5	QC8	Second check	EP	05.06.21	26
6	CM	Deburr	RG	05.06.21	26
7	QC5	Inspect work to Step 6	Z	05.06.22	26
8	ST	Identify and Stock	CPL	05.06.23	26
9	AC	Cost / part 7,13	JG	05.06.24	26
10	DC	Close W/O 6,13 Inspect Level 21	KJ	05.06.27	26

Rev	Date	Change	Revised By	Approved
A	05.03.14	New issue	KJ/JLM	

RELEASED  
5/05/03/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

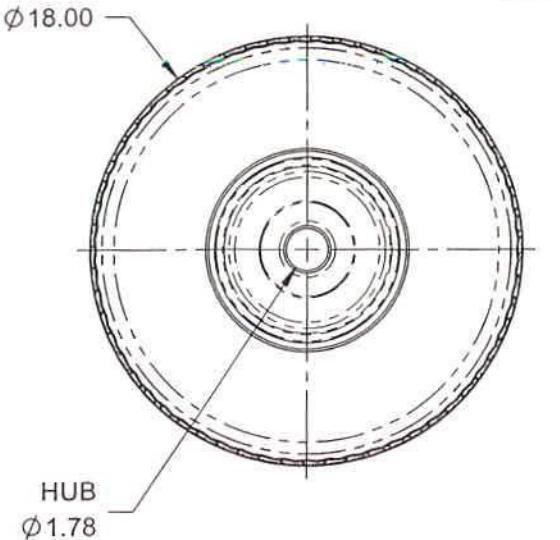
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

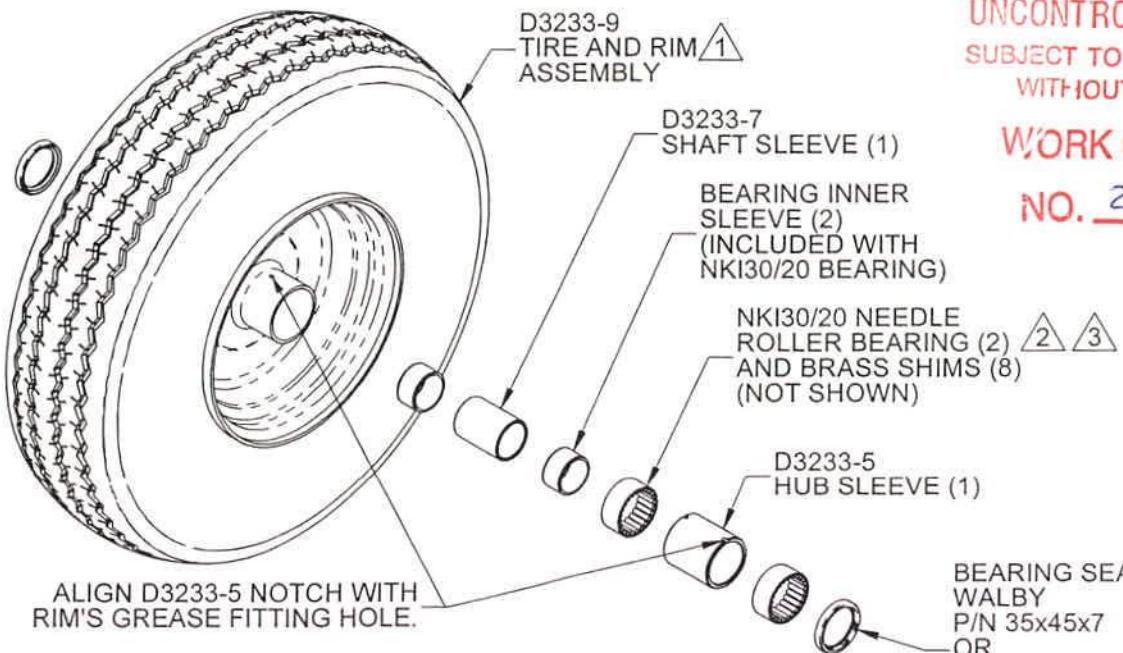
**DART**

DESIGN <i>b3</i>	DRAWN BY <i>b3</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>PF</i>	APPROVED <i>EGS</i>	DRAWING NO. D3233	REV. B	SHEET 1 OF 3
DATE 05.03.08		TITLE WHEEL ASSEMBLY	SCALE 1:1	
A	05.02.18	NEW ISSUE		
B	05.03.08	ADDED BEARING SEALS		

**RELEASED**  
*AB*  
05/05/04

WHEEL SPECIFICATIONS		
SIZE	MAXIMUM LOAD	MAXIMUM INFLATION LOAD
TIRE: 19.0 x 5.8 RIM: 5.70 x 8.0	910 LBS (RANGE C)	90 PSI*

\* MANUFACTURER'S RECOMMENDATIONS  
ARE 75 PSI FOR HIGH SPEED USE.

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**SUBJECT TO AMENDMENT**  
**WITHOUT NOTICE****WORK ORDER**  
**NO. 23001B****D3233-041 WHEEL ASSEMBLY**

BEARING SEAL  
WALBY  
P/N 35x45x7 △  
OR  
CR 35x45x7 HMS4 R  
P/N 13927  
(2 PLACES)

**NOTES:**

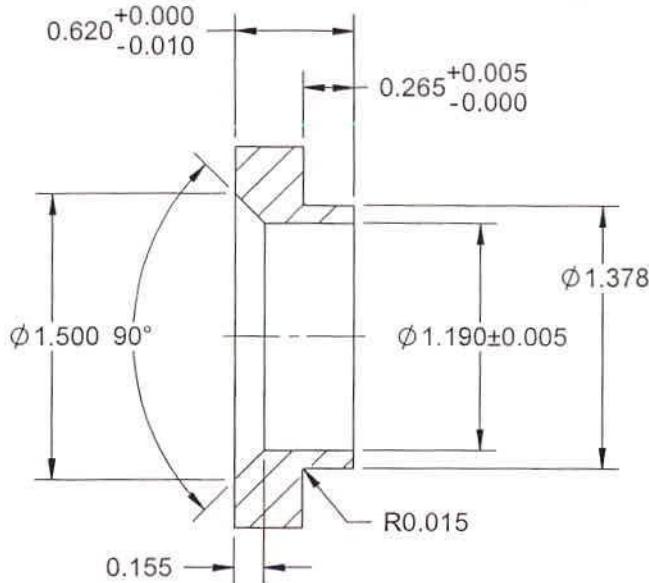
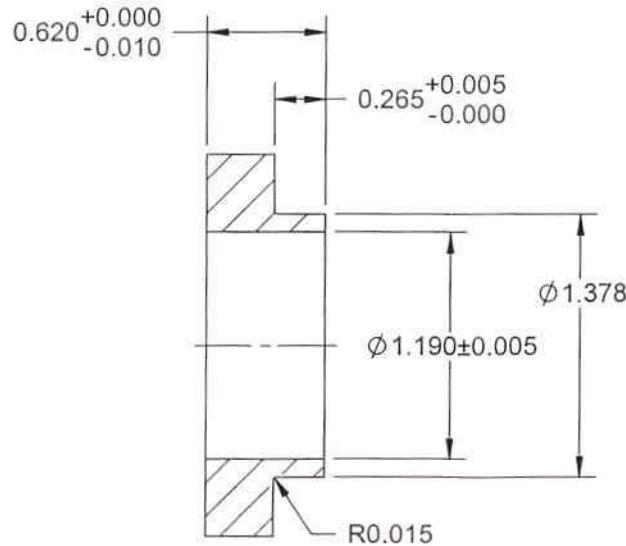
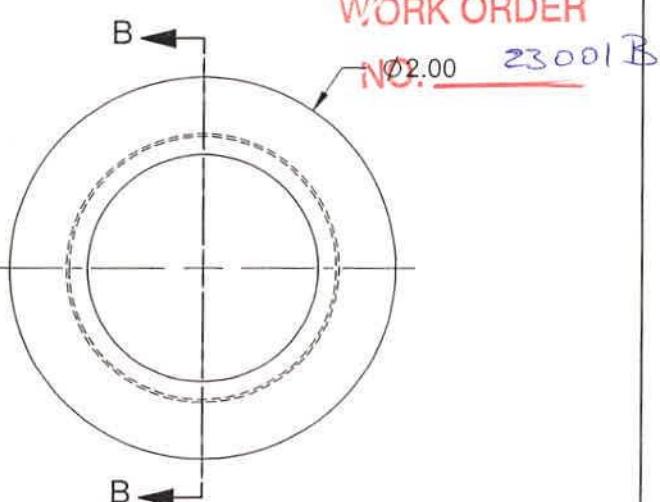
- 1) POSSIBLE SUPPLIER: McMaster-Carr, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH  
(4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT.
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3233
DATE 05.03.08	TITLE WHEEL ASSEMBLY	REV. B SHEET 2 OF 3 SCALE 1:1

SECTION A-AD3233-1 INSIDE WASHERSECTION B-BD3233-3 OUTSIDE WASHERNOTES:

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS (REF. DART SPEC. M1020TR)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

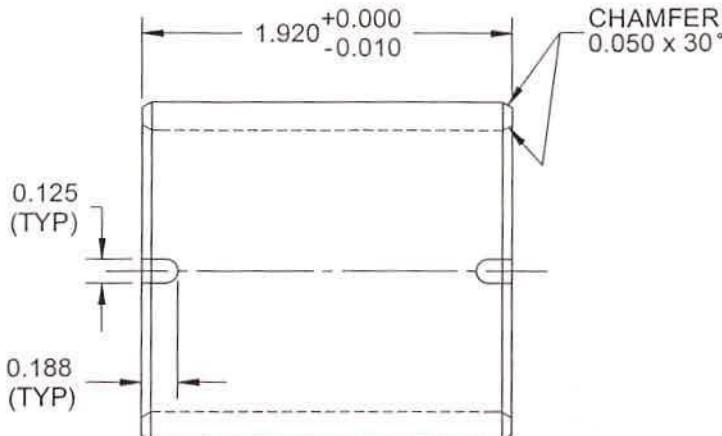
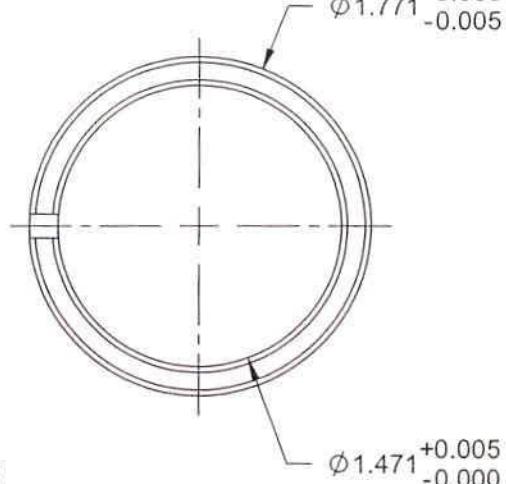
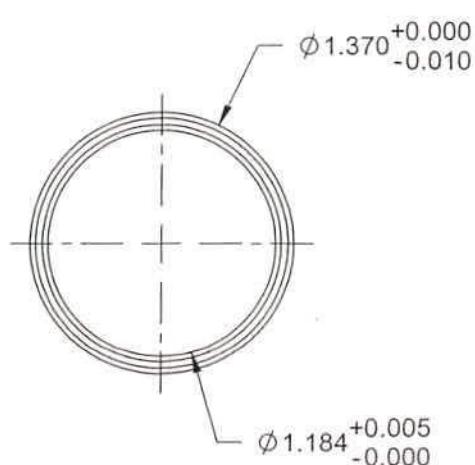
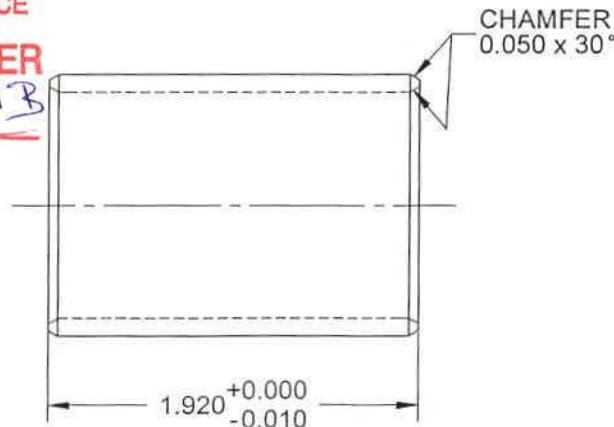
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**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3233	REV. B SHEET 3 OF 3
DATE 05.03.08	TITLE WHEEL ASSEMBLY	SCALE 1:1	

RELEASED  
*[Signature]*  
05/05/04

**SHOP COPY**RETURN TO  
ENGINEERINGD3233-5 HUB SLEEVE**UNCONTROLLED COPY**SUBJECT TO AMENDMENT  
WITHOUT NOTICE**WORK ORDER**NO. 230013D3233-7 SHAFT SLEEVE**NOTES:**

- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00  
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS  
(REF. DART SPEC. M1020TR)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.030

DART AEROSPACE LTD	Work Order:	23001
Description:	Part Number:	D3233-5
Inspection Dwg:	Rev:	Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

First Article       Prototype

Measured by:	BG	Audited by:	EP	Prototype Approval:	
Date:	05.06.21	Date:	05/06/21	Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

## Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Apr 12, 2005  
02:25 pm

Work Order No	:	0023001	Department Code:	
Project Name	:	D3233-5	Burden Flags	: NNNNNNN
Project For	:	WK518	WO Status	: Open
Work Order Type	:	Main	Invoice State	: Not Invoiced
Main WO Number	:		Invoice Date	:
House Part Number	:	D3233-5	Invoice Number	:
Description	:	Hub Sleeve	Invoice Amount	: 0.00
Manufactured	:	Yes		
Amount Req'd	:	34	Order Entry No	:
Amount Done	:	0	OE Value	: 0.00
Start Date	:	04-12-05	Est Mark Up	: 0.000%
Est Finish Date	:	04-30-05	Actual Mark Up	: 0.000%
Act Finish Date	:			
Drawings Reqd	:	No		
Ok for Approval	:			
Approval Rec'd	:		\$0 Posted to Finished Goods	

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	: 0.00	0.00	0.00	0.00	0.00
Engineering Hours	: 0.00	0.00	0.00		
Engineering Cost	: 0.00	0.00	0.00	0.00	0.00
Production Hours	: 0.00	0.00	0.00		
Production Cost	: 0.00	0.00	0.00	0.00	0.00
Packaging Hours	: 0.00	0.00	0.00		
Packaging Cost	: 0.00	0.00	0.00	0.00	0.00
OverHead Hours	: 0.00	0.00	0.00		
OverHead Cost	: 0.00	0.00	0.00	0.00	0.00
CNC Hours	: 0.00	0.00	0.00		
CNC	: 0.00	0.00	0.00	0.00	0.00
Misc. Hours	: 0.00	0.00	0.00		
Misc.	: 0.00	0.00	0.00	0.00	0.00
 Burden	 :	 0.00	 0.00	 0.00	
Total Cost	: 0.00	0.00	0.00		
Mark up	: 0.000	0.000			
Selling Cost	: 0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done	: 0.00	0.00
Profits/ (Loss)	: 0.00	0.00